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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/067,725

02/04/2002

Donald O'Connor

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EXAMINER

SHAND, ROBERTA A

ART UNIT

PAPER NUMBER

2616

DATE MAILED: 08/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/067,725

Applicant(s)

O'CONNOR, DONALD

Examiner

Roberta A. Shand

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 and 11-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 11-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 7-25-06

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-7, 9 and 11-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Golden (U.S. 6563793 B1) in view of Chuah (U.S. 6408001B1).
3. Regarding claim 1, Golden teaches (fig. 11) a method for supporting packet communications in an optical network (SONET), the method comprising: receiving packet data at a synchronous optical network element (NE); and switching the packet data to a concentrated path, the concentrated path providing an optical link between the synchronous optical network element and a remote synchronous optical network element (col. 16, lines 19-36); multiprotocol (col. 20, lines 34-44) label switching to provide a virtual private network (26) over a synchronous optical network.
4. Although Golden does teach MPLS (col. 20, lines 39-44), Golden does not explicitly teach concentrating a plurality of label switching paths to a concentrated path. Chuah teaches such feature.
5. Chuah teaches (fig. 8. and col. 9, lines 39-61) concentrating a plurality of label switching paths to a concentrated path. It would have been obvious to one of ordinary skill in the art to adapt this feature to Golden who teaches MPLS to help control traffic flow.

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6. Regarding claim 2, Golden teaches (col. 21, line 37 – col. 22, line 4) receiving the packet data using an ethernet port of the synchronous optical network element.

7. Regarding claim 3, Golden teaches (fig. 11) the virtual private network links the ethernet port of the synchronous optical network element and an ethernet port of the remote synchronous optical network element.

8. Regarding claim 4, Chuah teaches (fig. 8. and col. 9, lines 39-61) a multiprotocol label switch stack delineates a plurality of MPLS (label switching path) paths for the virtual private network.

9. Regarding claim 5, Chuah teaches (fig. 8. and col. 9, lines 39-61) mapping the packet data among the MPLS paths.

10. Regarding claims 6 and 17, Golden teaches (col. 10, lines 26-46) mapping based on Ethernet media access control address in the packet data.

11. Regarding claim 7, Golden teaches (col. 10, lines 26-46) mapping based on destination IP addresses included in the packet data.

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12. Regarding claim 9, Golden teaches (fig. 11) the concentrated path composes an optical synchronous transport signal link between the synchronous optical network element and a remote synchronous optical network element.

13. Regarding claim 11, Golden teaches (fig. 11) a synchronous optical network element comprising: an LAN (LAN A, LAN B) interface operable to receive packet data; a synchronous optical add/drop multiplexer (col. 16, lines 19-36), ADMs) operable to couple the interface to a synchronous optical network; and a multiprotocol label switch (col. 16, lines 19-36, MPLS) router (NE) operable to switch the packet data from the interface to a concentrated path across the synchronous optical network, wherein switching comprises multiprotocol label switching (col. 16, lines 19-36) to provide a virtual private network (fig. 11, 26) over the synchronous optical network (SONET).

14. Although Golden does teach MPLS (col. 20, lines 39-44), Golden does not explicitly teach concentrating a plurality of label switching paths to a concentrated path. Chuah teaches such feature.

15. Chuah teaches (fig. 8. and col. 9, lines 39-61) concentrating a plurality of label switching paths to a concentrated path. It would have been obvious to one of ordinary skill in the art to adapt this feature to Golden who teaches MPLS to help control traffic flow.

16. Regarding claim 12, Golden teaches (fig. 11) the concentrated path provides an optical link between the synchronous optical network element (NE) and a remote synchronous optical network element (NE) for the transmission of the packet data as MPLS traffic.

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17. Regarding claim 13, Golden teaches (col. 21, line 37 – col. 22, line 4) the LAN interface comprises an ethernet port.

18. Regarding claim 14, Golden teaches (fig. 11 and col. 21, line 37 – col. 22, line 4) the virtual private network links the ethernet port to an ethernet port of a remote synchronous optical network element.

19. Regarding claim 15, Chuah teaches (fig. 8. and col. 9, lines 39-61) the NIPLS router maintains an MPLS stack delineating a plurality of MPLS paths for the virtual private network.

20. Regarding claim 16, Chuah teaches (fig. 8. and col. 9, lines 39-61) the MPLS router is further operable to map the packet data among the MPLS paths.

21. Regarding claim 18, Chuah teaches (col. 5, lines 5-47) the MPLS router (LSR) maps the packet data based on destination IP addresses included in the packet data.

22. Regarding claim 19, Golden teaches (fig. 11) a synchronous optical network element comprising: a LAN (LAN A, LAN B) interface operable to receive packet data for a plurality of label switched paths; a synchronous optical add/drop multiplexer (col. 16, lines 19-36), ADMs) operable to couple the LAN interface to a synchronous optical network (col. 16, lines 19-36), SONET); and a multiprotocol label switch router (NE) operable to switch the packet data from the interface to a concentrated path across the synchronous optical network, wherein switching

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comprises multiprotocol label switching to provide a virtual private network (fig. 11, 26) over the synchronous optical network; wherein the concentrated path provides an optical link between the synchronous optical network element and a remote synchronous optical network element for the transmission of the packet data as MPLS traffic, and wherein the virtual private network links the interface to a port of the remote synchronous optical network element (col. 20, lines 24-44).

23. Although Golden does teach MPLS (col. 20, lines 39-44), Golden does not explicitly teach concentrating a plurality of label switching paths to a concentrated path. Chuah teaches such feature.

24. Chuah teaches (fig. 8. and col. 9, lines 39-61) concentrating a plurality of label switching paths to a concentrated path. It would have been obvious to one of ordinary skill in the art to adapt this feature to Golden who teaches MPLS to help control traffic flow.

25. Regarding claim 20, Chuah teaches (fig. 8. and col. 9, lines 39-61) the MPLS router is further operable to maintain an MPLS stack delineating the label switched paths for the virtual private network.

26. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Golden in view of Chuah and further in view of Makam (U.S. 2001/0033570 A1).

27. As mentioned above, Golden and Chuah teach all of the limitations of claim 1.

28. Golden and Chuah do not teach a LDP address.

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29. Makam teaches (paragraph 41) routing the packet data based on label information distributed using label distribution protocol (LDP). It would have been obvious to one of ordinary skill in the art to adapt LDP addresses to Golden and Chuah's system, as it is well known in the art.

Response to Arguments

30. Applicant's arguments with respect to claims 1-9 and 11-20 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

31. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Roberta A Shand whose telephone number is 571-272-3161. The examiner can normally be reached on M-F 9:00am-5:30pm.

32. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on 571-272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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33. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Roberta A Shand
Examiner
Art Unit 2665



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